

IN THE CLAIMS:

Please AMEND claims 21, 27, 30 and 33, as follows. For the Examiner's convenience, all pending claims are reproduced below:

1 - 20. (Previously Cancelled)

21. (Currently Amended) A scan type exposure apparatus for transferring a pattern onto a substrate by scan exposure, said apparatus comprising:

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a stage for moving the substrate in a Y direction corresponding to a scan direction, and in an X direction intersecting the scan direction;

an alignment scope for performing measurement for alignment of the substrate, at a position spaced, in the Y direction, from a position where the exposure of the substrate is to be carried out, said alignment scope being disposed on a straight line parallel to a Y-axis and passing through the position for exposure of the substrate;

an X measuring device for performing yaw measurement of said stage by use of an X reflection surface provided on said stage along the Y direction;

a Y measuring device for performing yaw measurement of said stage by use of a Y reflection surface provided on said stage along the X direction; and

a controller being operable to select yaw measurement information of said X measuring device for an alignment operation including the alignment measurement using said

alignment scope, and being operable to select yaw measurement information of said Y measuring device for the scan exposure.

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22. (Previously Added) An apparatus according to Claim 21, wherein said X measuring device includes (i) an X-direction interferometer for measuring a position of said stage in the X direction and (ii) an X yaw interferometer cooperating with said X-direction interferometer to measure yawing of said stage, and said Y measuring device includes (i) a Y-direction interferometer for measuring a position of said stage in the Y direction and (ii) a Y yaw interferometer cooperating with said Y-direction interferometer to measuring yawing of said stage.

23. (Previously Added) An apparatus according to Claim 22, wherein said X-direction interferometer and said X yaw interferometer are arranged to use a light beam reflected by said X reflection surface, and said Y-direction interferometer and said Y yaw interferometer are arranged to use a light beam reflected by said X reflection surface.

24. (Previously Added) An apparatus according to Claim 23, wherein, in the scan exposure, said controller performs position control of said stage, on the basis of said Y-direction interferometer, said Y yaw interferometer, and said X-direction interferometer.

25. (Previously Added) An apparatus according to Claim 21, wherein said controller is operable, in accordance with an operation state of said exposure apparatus, including an alignment operation and a scan exposure operation, to perform an averaging processing or a statistical processing to measurement data obtained by said X measuring device and said Y measuring device.

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26. (Previously Added) An apparatus according to Claim 21, wherein said controller is operable to perform yaw measurement using said X measuring device, when said stage is to be moved after the alignment measurement using said alignment scope.

27. (Currently Amended) A scan type exposure apparatus for transferring a pattern onto a substrate by scan exposure, said apparatus comprising:

a stage for moving the substrate in a Y direction corresponding to a scan direction, and in an X direction intersecting the scan direction;

an alignment scope for performing measurement for alignment of the substrate, at a position spaced, in the X direction, from a position where the exposure of the substrate is to be carried out, said alignment scope being disposed on a straight line parallel to an X-axis and passing through the position for exposure of the substrate;

a Y measuring device for performing yaw measurement of said stage by use of a Y reflection surface provided on said stage along the X direction, said Y measuring device including (i) a Y-direction interferometer for measuring a position of said stage in the Y

direction, and (ii) a Y yaw interferometer being cooperable with said Y-direction interferometer to measure yawing of said stage; and

a controller being operable to select yaw measurement information of said Y measuring device, both for an alignment measurement using said alignment scope and for the scan exposure operation.

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28. (Previously Added) An apparatus according to claim 27, further comprising an X measuring device for performing yaw measurement of said stage by use of an X reflection surface provided on said stage along the Y direction, wherein said X measuring device includes (i) an X-direction interferometer for measuring a position of said stage in the X direction and (ii) an X yaw interferometer being cooperable with said X-direction interferometer to measure yawing of said stage.

29. (Previously Added) An apparatus according to Claim 28, wherein said X-direction interferometer and said X yaw interferometer are arranged to use a light beam reflected by said X reflection surface, and said Y-direction interferometer and said Y yaw interferometer are arranged to use a light beam reflected by said Y reflection surface.

30. (Currently Amended) A scanning exposure method for transferring a pattern onto a substrate by scan exposure, said method comprising the steps of:

moving a stage to move the substrate in a Y direction corresponding to a scan direction, and in an X direction intersecting the scan direction;

performing, through an X measuring device, yaw measurement of the stage using an X reflection surface provided on the stage along the Y direction;

performing, through a Y measuring device, yaw measurement of the stage using a Y reflection surface provided on the stage along the X direction; and

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selecting yaw measurement information of the X measuring device for an alignment operation including ~~the~~ alignment measurement of the substrate ~~using the~~ to be carried out by using an alignment scope and at a position spaced, in the Y direction, from a position where the exposure of the substrate is to be performed, the alignment scope being disposed on a straight line parallel to a Y-axis and passing through the position for exposure of the substrate; and

selecting yaw measurement information of the Y measuring device for the scan exposure.

31. (Previously Added) A method according to Claim 30, wherein, in accordance with an operation state of an exposure apparatus including an alignment operation and a scan exposure operation, an averaging processing or a statistical processing is performed to measurement data obtained by the X and Y measuring devices.

32. (Previously Added) A method according to Claim 30, wherein the yaw measurement using the X measuring device is performed when the stage is to be moved after the alignment measurement using the alignment scope.

33. (Currently Amended) A device manufacturing method, comprising the steps of:

coating a substrate with a resist, the substrate to be scanningly exposed with a pattern;

moving a stage to move the substrate in a Y direction corresponding to a scan direction, and in an X direction intersecting the scan direction;

performing, through an X measuring device, yaw measurement of the stage using an X reflection surface provided on the stage along the Y direction;

performing, through a Y measuring device, yaw measurement of the stage using a Y reflection surface provided on the stage along the X direction;

selecting yaw measurement information of the X measuring device for an alignment operation including alignment measurement of the substrate to be carried out by use of an alignment scope and at a position spaced, in the X direction, from a position where the exposure of the substrate is to be performed, the alignment scope being disposed on a straight line parallel to an X-axis and passing through the position for exposure of the substrate;

selecting yaw measurement information of the Y measuring device for the scan exposure; and

developing the resist after the scan exposure.